WHAT IS CLAIMED IS:

1. An optical fiber comprising:

a lens integrally formed on an end of the optical fiber, the lens having a finite maximum radius of curvature in a first direction and a finite radius of curvature in a second direction orthogonal to the first direction, wherein the radius of curvature in the first direction is different from the radius of curvature in the second direction, and wherein at least one of the first and second directions is non-orthogonal to a longitudinal axis of the optical fiber.

2. The optical fiber of claim 1, wherein the lens shape is substantially an oblate spheroid.

3. The optical fiber of claim 1, wherein the lens has a continuous curvature.

4. The optical fiber of claim 1, wherein the lens is devoid of discontinuous surfaces.

5. The optical fiber of claim 1, wherein a transverse cross-section of the optical fiber has an anisotropic physical property.

6. The optical fiber of claim 5, wherein the anisotropic physical property includes the bending stiffness of the optical fiber.

7. The optical fiber of claim 5, wherein the anisotropic physical property includes the abrasion resistance of the optical fiber.

8. The optical fiber of claim 5, wherein the optical fiber is a polarization maintaining (PM) fiber.

9. The optical fiber of claim 5, wherein the optical fiber is a polarizing (PZ) fiber.

10. The optical fiber of claim 5, wherein the transverse cross-section is non-circular.

11. A method for forming a microlens on an optical fiber, the method comprising: drawing a tip of an optical fiber over an abrasive media in a spiral curvilinear pattern.

12. The method of claim 11, further comprising stripping an outer coating of the fiber such that a portion of the outer coating remains on the fiber after said stripping.

13. The method of claim 12, further comprising holding the fiber at a position on the fiber such that the portion of the outer coating remaining after said stripping protrudes from an end of a fiber holder, and wherein the fiber drawn of the abrasive media is unsupported bare fiber.

14. The method of claim 11, further comprising maintaining a non-zero contact angle of about 15° or less during said drawing.

15. The method of claim 11, wherein the spiral pattern is selected from the group consisting of substantially oval spirals, substantially elliptical spirals, substantially egg-shaped spirals, substantially pill-shaped spirals, and substantially iron-shaped spirals.

16. The method of claim 11, wherein drawing a tip of an optical fiber over an abrasive media in a spiral curvilinear pattern comprises drawing a tip of an optical fiber over an abrasive media in a substantially oval pattern.

17. The method of claim 11, wherein drawing a tip of an optical fiber over an abrasive media in a spiral curvilinear pattern comprises drawing a tip of an optical fiber over an abrasive media in a substantially elliptical pattern.

18. The method of claim 11, wherein drawing a tip of an optical fiber over an abrasive media in a spiral curvilinear pattern comprises drawing a tip of an optical fiber over an abrasive media in a substantially egg-shaped pattern.

19. The method of claim 11, wherein drawing a tip of an optical fiber over an abrasive media in a spiral curvilinear pattern comprises drawing a tip of an optical fiber over an abrasive media in a substantially pill-shaped pattern.

20. The method of claim 11, wherein drawing a tip of an optical fiber over an abrasive media in a spiral curvilinear pattern comprises drawing a tip of an optical fiber over an abrasive media in a substantially iron-shaped pattern.

21. The method of claim 11 wherein drawing a tip of an optical fiber over an abrasive media comprises drawing a tip of an optical fiber having a transverse cross-section with an anisotropic physical property.

22. The method of claim 11 wherein drawing a tip of an optical fiber over an abrasive media comprises drawing a tip of an optical fiber over a flat abrasive media.

23. The method of claim 11, further comprising holding the optical fiber at a location spaced apart from the tip of the optical fiber.

24. The method of claim 23, further comprising bending the optical fiber as the tip is drawn over the abrasive media.

25. The method of claim 11, further comprising controlling a pressure exerted on the tip of the fiber.

26. A method for forming a microlens on an optical fiber, the method comprising: drawing a tip of an optical fiber over an abrasive media in a curvilinear pattern that is selected from the group consisting of substantially oval patterns, substantially

elliptical patterns, substantially egg-shaped patterns, substantially pill-shaped patterns, and substantially iron-shaped patterns.

27. The method of claim 26, further comprising maintaining a non-zero contact angle of about 15° or less during said drawing.

28. The method of claim 26, further comprising holding the optical fiber at a location spaced apart from the tip of the optical fiber.

29. The method of claim 28, further comprising bending the optical fiber as the tip is drawn over the abrasive media.

30. The method of claim 26, further comprising controlling a pressure exerted on the tip of the fiber.